

Woodworking centre changing operations

By Colleen Cassidy

Major changes are in the works for September at Conestoga's woodworking centre.

Mark Forgeron, an instructor at the woodworking centre, said there will be changes in costs, as well as in the delivery system.

Forgeron said members of the woodworking faculty have seriously looked at cutting costs while improving teaching methods, although "it's not an easy thing to do."

In order to achieve the changes, said Forgeron, the classes are going to be larger but there will be team-teaching, with two instructors present at each class. It will work well in the shop, he added.

Forgeron said there are 93 woodworking technician and technology students registered.

As well, he said, there will be woodworking apprenticeship students attending classes throughout the year.

Forgeron said there will be one part-time instructor hired.

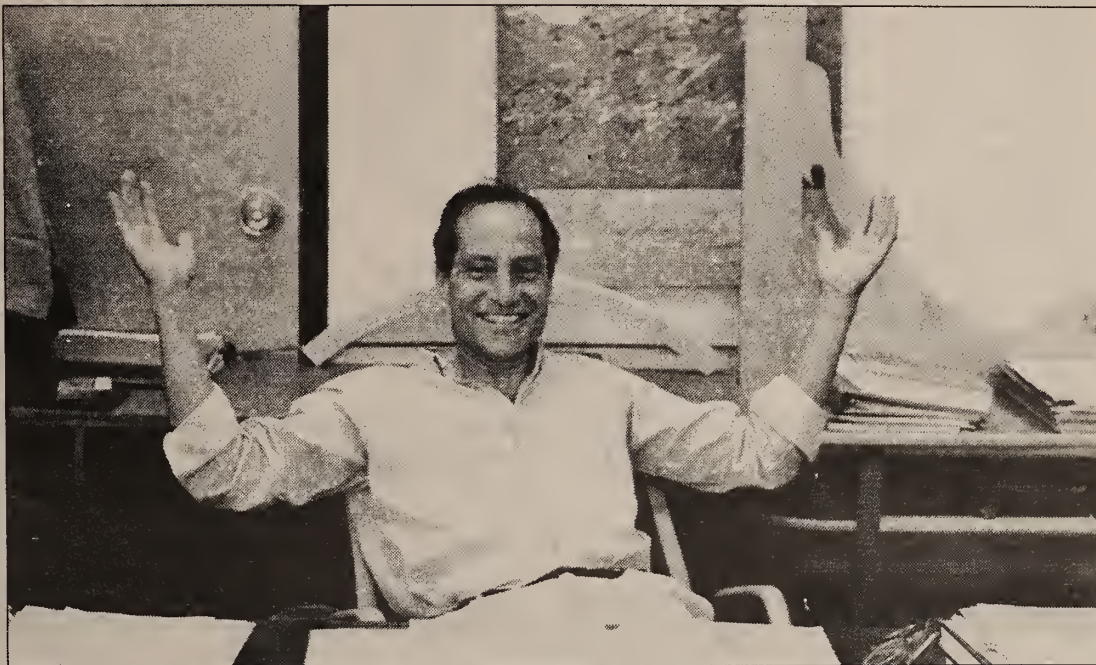
Some outdated equipment has already been sold and will be replaced by updated technology, Forgeron said. The equipment that was sold includes an edge bander, a double-end tenon and a cut-off saw.

Forgeron said staff and faculty want the woodworking centre to maintain a high profile, and they want to continue to be able to deliver quality programs to students.

"The woodworking environment and technology is constantly changing," Forgeron said, "and we want to keep right on top of it."

Forgeron, who is replacing Mark Bramer as a program co-ordinator for the next year, said he is looking forward to the new information Bramer will bring back to the college when he returns next year.

Bramer is on a year-long professional development leave at the University of British Columbia.



Mark Forgeron, an instructor at the woodworking centre, will be replacing Mark Bramer as program co-ordinator for the upcoming year. He says he will be looking for ways to cut costs and improve teaching methods.

(Photo by Colleen Cassidy)

Performers wanted

Big Sugar concert still seeking opening act

By L.A. Livingston

While the band Big Sugar is confirmed and ready to play at Conestoga College on Sept. 10, negotiations are still under way for an opening act, the entertainment manager for the Doon Student Association said.

Steve Harris said he is hoping to get Dana Manning, a musician from Stratford who is part of Sarah McLachlan's Lilith Fair, to start the Big Sugar concert off.

"This opening act is one thing I need to get settled," he said. "I'm hoping to snag her (Manning) before her price goes up."

He said he is waiting for confirmation in order to book the act.

Harris said the opening act will play for about an hour, with 20 minutes for changeover in between acts. Big Sugar will perform for about 90 minutes, he said, with about 20 minutes extra for an encore.

Big Sugar is on its Hemi-vision tour and is playing the college market, he said.

Harris calls Big Sugar "a bluesy rock band." The music is influenced by blues and jazz, he said.

The band is popular and continues to sell out its shows, he said, and he hoped the Sept. 10 performance would be a sell out.

The concert will be held at the Kenneth E. Hunter Recreation Centre, which has a capacity of 1,000 people.

"If we get a large crowd for this, it will indicate what the rest of the year will be like," he said.

The first 500 tickets will be set aside for students at \$10 a ticket, he said. Since the concert is also open to the general public, Harris said the rest of the tickets will be sold at \$12.50 for regular admission, and \$15 at the door.

Last September's concert act,

Ashley MacIsaac, drew about 450 students to a concert restricted to Conestoga students, said Becky Boertien, DSA director of student life.

Tickets will be available at the Doon Student Association (DSA) office located in the Sanctuary once all the details are wrapped up, Harris said.

Advertisements for the concert will be put in the registration packages going out to first-year students, Harris said, and there will be extensive advertising around campus.

Harris said he is also planning to put ads in the Kitchener-Waterloo Record and Gig Magazine in Guelph, as well as contact local businesses to sell tickets.

He said he also wants to put some ads around University of Waterloo and Wilfrid Laurier University.

Talkin' trash



Brian Grimace tips a motor control centre into a dumpster as Darrin Brenner looks on. The two are employed by the Tippet Richardson Moving Company, which had the contract to get rid of unwanted and useless items. The items were stored in the quonset huts near the Detweiler Centre.

(Photo by Pat Craton)

New program offered at Waterloo campus

By Bob Puersten

Conestoga will be offering a health office operations program, starting in September, said Edith Torbay, chairwoman of the school of business.

A one-year certificate program is designed for people who want to work in health care offices, such as those found in hospitals, dentist or medical offices or clinics, said Torbay.

The health office operations program will be housed at Conestoga's Waterloo campus and will be provided on both a full-time and part-time basis, said Torbay. Part-time courses will be offered through the continuing education department, Torbay said.

Torbay said there are 30 full-time students starting the new program in September. Part-time enrolment figures were not available.

Four cameras and a monitor Doon security surveillance extended

By Hélène Beaulieu

For the past couple of weeks Barry Milner, manager of physical resources at Conestoga, has been testing new surveillance equipment that is going to be giving Doon campus security a technological hand up.

The purchase of four cameras and one monitor has been funded with money from the Campus Safety for Women Grant.

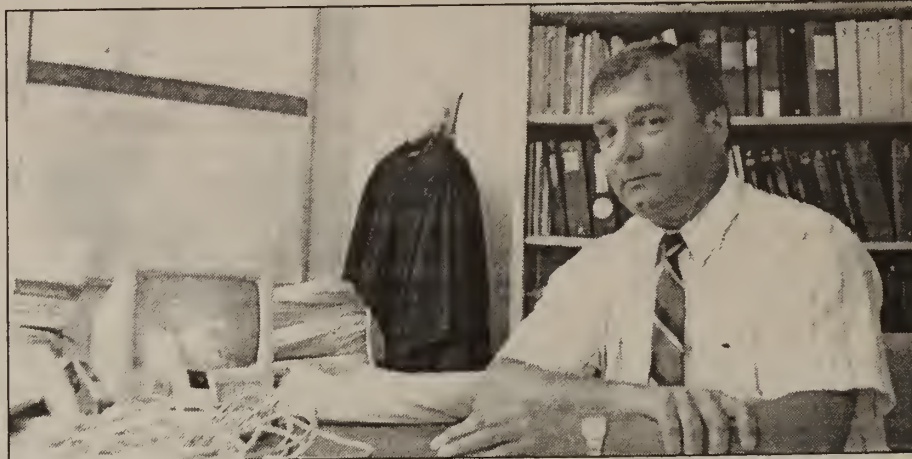
By September, two of the cameras will have been installed in the bookstore and two in room 2A11-3 which will house the new open access computer lab. One eight-inch monitor will be located in the security office, giving security staff visual access to these otherwise isolated areas of the main building.

Milner said these two areas are receiving the first of the new equipment because of safety concerns.

He said the significant distance of the rooms from the security office, the lab's extended hours in the fall and the cash in the bookstore make them an obvious priority.

"If we use all the parts," said Milner of the equipment, "we'll be able to talk back and forth from security to the rooms."

Milner said the installation of the new monitoring system is intended to be an



Barry Milner, manager of physical resources, shows the new surveillance equipment that is to be installed in the bookstore and computer lab for September. (Photo by Hélène Beaulieu)

ongoing, multi-year project and eventually, pending funding, all labs will be similarly equipped.

"We will be starting out in those locations, but do not be surprised to see us move further," he said.

But Milner said he doesn't expect funding to be continuously available for the project, so it could take a number of years to complete.

"I would like to see it completed as soon

as we can," he said. "I would like to see us do four labs a year." However, Milner said, with the number of computer labs expected to grow from the existing 16, he thinks the project will take longer than the projected four years.

Milner said the college received \$2,350 from the Women's Safety Grant to cover the cost of buying the equipment, which will be installed by staff from Doon's physical resources department.

He also said the addition of Marlene Mintz to the security staff means the college is better able to make use of security hours to monitor the surveillance equipment 24 hours a day.

Mintz transferred to security from the school of health sciences on July 21. She is responsible for providing information and accounting services, which gives the guards a better opportunity to do more security work.

The effect, said Milner, is the constant availability of security personnel to respond to client needs.

Also, he added, talks have been underway to develop a part-time position in security as part of the Walk Safe program. The paid position would be administered through Conestoga's work-study program and would employ students from law and security administration.

Milner said he still needs to meet with registrar Fred Harris and LASA co-ordinator Bob Hays to put together the final points of the agreement before it can be finalized.

With all the recent developments, said Milner, the college is making maximum use of its current level of security funding.

He said the main benefit for students from these initiatives is a safer study environment.

\$26,000 grant acknowledges safety concerns

By Hélène Beaulieu

The Doon campus health, safety and environment co-ordinator said the Campus Safety for Women Grant helps colleges and universities improve safety on campus by supporting programs that deal with women's safety, sexual harassment and violence against women.

Kim Radigan said the \$26,000 grant is funded by the Ministry of Education and Training and is divided between all colleges and universities in the province. It is responsible for financing this year's purchase of the surveillance equipment being installed in the

bookstore on Doon Campus and the open access computer lab in room 2A11-3.

Two cameras will be located in each room and a monitor will be placed in the security office to improve student and staff safety in the two areas.

Radigan said that over the six years Conestoga has been receiving the grant the criteria for the award has changed.

"At this point," she said, "the criteria is that we're supposed to continue with initiatives that we've already started. We've done a lot of things in the area of security, but we use it in a number of differ-

ent areas."

Radigan said outdoor lighting has been one of the major uses of the grant in the past. "The lighting in the parking lots has been vastly improved over the years as well as along the walkways," she said.

The grant is also responsible for stocking the women's resource centre in Doon's learning resource centre as well as funding the purchase of mirrors in the hallways, security buzzers in staff offices, and supplies for the Doon Student Association (DSA) Walksafe program and harassment and discrimination workshops.

Currently, Radigan said, an ini-

tiative is underway to provide college staff with training in non-violent crisis intervention. The training is being offered to staff in frontline positions who constantly deal with students or the public.

"We're going to be training them how to verbally de-escalate someone who may be getting very upset or violent," said Radigan.

She said efforts are also being made to develop a crisis response team to deal with individuals who may be physically aggressive or violent.

She said the team, which she hopes to have together by Christmas of 1997, will get special

training on how to deal with violent individuals in a non-violent manner.

Radigan said when necessary the team will be called in to deal with violent situations via the new public address system currently being installed throughout the main building.

But Radigan said the initiative is a pro-active movement.

"We really haven't had anything like that happen yet," she said.

"We're trying to be prepared because a lot of public institutions are starting to do this training and I think that in a couple of years it may even start to be mandatory."

Parking for sale

Passes likely to sell out quickly at Doon this year, says security officer

By Rebecca Eby

If this year turns out to be anything like past years, all parking passes for spaces on the Conestoga College Doon campus will be sold by the first couple weeks of September.

"We always end up with a waiting list," said Cathy Downie, campus security officer.

She said last year, some of the lots were sold out by the first day of school.

After the first 2 1/2 days of selling passes this year, close to 500 of the approximately 2,700 spaces were sold, Downie said.

She said part of the reason for the quick sales could be that students have learned to purchase passes as soon as possible or they might not be able to get them. "Last year's students are realizing they should get them now or they'll be pooched again," she said.

Downie said the first customer was a woman who stood in line for 45 minutes on the first day of sales, Aug. 5, to be sure to get the lot she wanted.

Bob Gilberts, security supervisor at the

college, said passes might go on sale sooner in upcoming years, possibly even by the end of the winter term. "If we can get it mobilized, we'll do it," he said.

Downie said the lots selling most quickly are those closest to the main buildings on campus.

"Red lots eight and nine and blue lot twelve are our biggest sellers," she said.

Downie said when selling passes, she tries to convince students to buy parking for the orange lots because they're actually closer to the main teaching building than the more popular blue lot.

"We tell them, but they take a look at the map and blue looks closer, so they take it," she said.

"That's because people don't want to walk," said Gilberts.

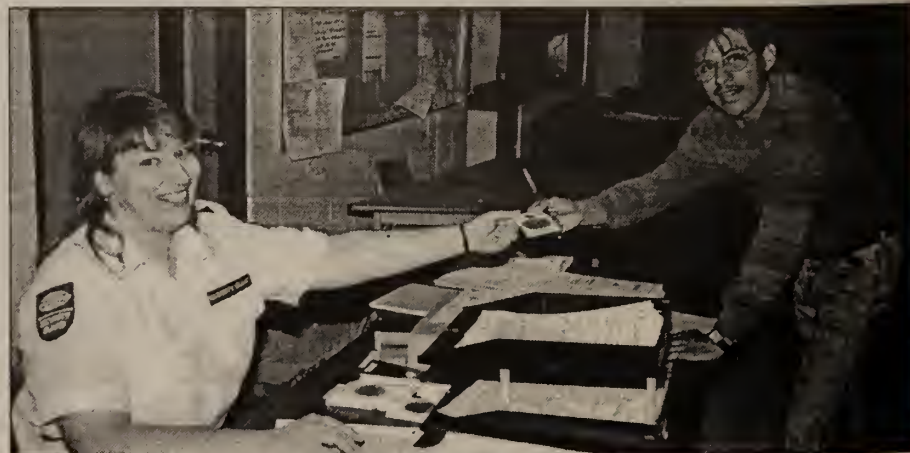
Downie said lots 10 and three are the least popular because they're further out. However, 10 and two cost the basic parking rate of \$117 for the year.

"They're the cheapest you can get," said Gilberts.

He said to park in lot two or 11, students should arrive early.

"Eleven and two are filled very quickly in the morning. That's before 8:30," he said.

College staff receive no better rates or preferred parking spots and must purchase their passes on a first-come-first-served basis as



Michelle Wadge gives Jose Merino, a first-year mechanical engineering student, his new parking pass for this fall. (Photo by Tony Kobilynk)

well, said Downie.

Gilberts said the rates for all lots are about mid-stream of the price ranges offered at other colleges. Conestoga's most expensive pass is \$158 per year.

He cautioned that those who don't purchase a pass and park in a campus lot might be subject to a \$15 parking ticket issued by a campus bylaw officer for the City of Kitchener.

He said the city issues penalties as well if offenders remain defiant or don't pay up.

"If the situation warrants," Gilberts said,

"we can write a ticket for the same vehicle every two hours."

"After a while, if the person keeps violating the rules and regulations, we give him warning that he will be towed off the property."

He said after the first week of weeding out people who don't know they're in the wrong lots, a bylaw officer is sent out each day to ticket illegally parked vehicles.

"That's all she does all day," he said.

"In one day, we can run anywhere from 10 to 50 tickets."

Correction

Astrid Weston's name was spelled incorrectly in the Aug. 5 issue of Spoke. Also, Astrid and her sister Charlotte were misidentified as twins.

Waterloo campus

Dining room expanded to accommodate intake

By Pat Craton

When the Conestoga Room at the Waterloo campus re-opens for business in October, customers will be eating in a larger and more brightly decorated dining room.

The increase in the student intake in the food and beverage program coupled with the popularity of the dining room with residents of Waterloo and area made it necessary for the dining room to be

extended, said Edith Torbay, Conestoga College's chair of the school of business, of which the food and beverage program is a part.

The decision to increase the number of students in the food and beverage program was made earlier this year, said Beth Esenbergs, co-ordinator of the food and beverage program, which is taught at the Waterloo campus.

Last year there were 200 applicants but only 39 were accepted

because that was the maximum number for the program said Esenbergs. "This was an indication to us that there are more students in this area interested in the hospitality industry."

This September the number is set at 56. Currently there are 46 confirmed students but Esenbergs said she is confident the target will be achieved because there are a number of applicants who are yet to sit the math and English qualifying tests. Also, there is a growth in the food industry as indicated by the number of advertisements in the newspapers for dining room managers and kitchen supervisors. "There is no fear of not filling the quota," she said.

The new dining room is 1,500 square feet in area, a little more than double the old dining room, which was 700 square feet, said

Dave Putt, director of physical resources. The classroom behind the dining room was appropriated to provide the space for the extension, he said.

Esenbergs said not all the extra space is devoted to dining. There is now a vestibule with a cloak room and the reception area is more spacious.

The room is accessed through double doors from the hall. Inside, there are now two windows instead of one. All of the lighting will be controlled by dimmer switches and the lights will be on wall sconces placed eight feet apart. There is also a bulkhead which drops about eight to 10 inches from the ceiling to provide architectural interest, Esenbergs said.

The dining room will seat 60, although it can accommodate

more for special occasions. Esenbergs said she has to take into consideration the number of students working in the dining room. "I can't put more seats in there than I feel the students could handle."

The dining room service will continue to include linen table cloths, fine china and glassware. "We will continue to project the image of fine dining," Esenbergs said.

Esenbergs said being at the Waterloo campus made it easy to expand because there is space there. "Had we been at Doon it might not have been easy or possible because it is so busy there. This will bring more activity to the Waterloo campus."

An official opening ceremony of some kind is being planned for the new dining room, Esenbergs said.



STANDING TALL — Mario Briski is hard at work sanding a bulkhead in the cafeteria of the Waterloo campus Aug. 7. Briski is an employee of Great Expectations, a dry-wall contracting company hired by the college. (Photo by Pat Craton)

Business component integral to program

By Pat Craton

There is much more to the food and beverage program than learning about food preparation and dining room service, said Beth Esenbergs, co-ordinator of the program.

During the two-year diploma program, only one-third of the student's time is spent in the kitchen and dining room, Esenbergs said, the other two-thirds is spent taking core business courses that are offered in the school of business. "The program is part of the school of business. People tend to forget that," Esenbergs said.

The program has a strong hands-on component, said Esenbergs. Students gain experience in food preparation, dining room service, and bartending. "They take all the food-related courses such as sanitation, nutrition, menu-planning, and an extensive wine course," Esenbergs said.

In addition to the food-related courses, the students take business

courses in communication, accounting, and cost control dealing with food, beverages and labor. Students are also required to take courses in marketing, human resources management, and organizational behavior. There is also a strong emphasis on computer usage, said Esenbergs.

Esenbergs said by the time students leave, most of them have decided where they prefer to work — the back or the front of the house.

The back of the house refers to the kitchen. Students who prefer working there can accept positions as line cooks, or kitchen supervisors, or they can go on to a cook-apprentice program. If they choose the latter, students have to accumulate 6,000 hours working in the industry before they are allowed to write provincial exams so they can qualify as cooks, said Esenbergs.

Any hours students work in the industry prior to joining the program and those worked in the co-

op portion of the program can be counted towards the 6,000 hours.

Students who prefer dealing with customers work in the front of the house where they can be bartenders, dining-room supervisors, or a host or hostess, Esenbergs said. Some students who are management-oriented go into management-trainee programs, she added.

As the food and beverage program is a co-op program, students spend a term working in the hospitality industry. Esenbergs said students are placed in a variety of locations — from B.C. to the resorts in Muskoka and Haliburton. Two students have gone even farther afield; one is working in London, England and the other, in Tours, France, Esenbergs said.

"When students graduate, they have the hands-on techniques and a good, sound business background. The program gives them a really sound basis from which to proceed into the industry," Esenbergs said.

Consultant says students' diets lack vital nutrients

By Alison Shadbolt

Students' diets are commonly missing some essential nutrients because of poor eating habits, said a Kitchener registered nutrition consultant.

"Students are into high-fat foods because they're on their own," said Joanne Brophy.

"They've moved away from home and they have to cook for themselves. They haven't got time to do that because they're studying and doing projects, so it's easier to eat a high-fat diet."

Consultations with nutritionists can help students identify the vitamins and minerals they are missing and why. The staff at Conestoga's health and safety office can refer anyone who is interested to a registered nutritionist, said Kim Radigan, co-ordinator of health, safety and environment for the college.

A fitness consultation at the Kenneth E. Hunter recreation centre also includes information on nutrition and diet, said Paula Feddema, administrative co-ordi-

nator of the recreation centre. Appointments can be arranged through the recreation centre.

Extensive health questionnaires about lifestyle, exercise, stress, symptoms and diet, administered by registered nutritionists, help identify any missing nutrients, said Brophy.

Levels of B vitamins are often low in students' diets, she said. These are important for the nervous system, so people lacking them may be more nervous, edgy, and irritable. A vitamin B deficiency may also result in anemia and poor food absorption. Students are especially susceptible because they are under intense stress, Brophy said.

Minerals often lacking in a young woman's diet are calcium and magnesium, she said. Students with a deficiency are restless and have trouble sleeping. They may grind their teeth and have tight muscles and cracking joints.

Levels of zinc are commonly low in young men, said Brophy. This mineral is essential for the prostate gland to function properly in regu-

lating hormones. It is also associated with the healing of wounds, she said.

Nutritional supplements should be used as a last resort, said Carole Hea, supervisor of health services for the University of Waterloo.

She recommended following Canada's Food Guide to ensure all

nutritional requirements are met. The guides and various pamphlets on nutrition are available at Conestoga's health and safety office.

Brophy also recommends replacing foods like candy, high-fat foods, soda and coffee with fruits and vegetables and following the

food guide suggestions. She said the change in diet should be gradual.

"It should be considered a permanent lifestyle change, rather than a diet. People should learn to look after their physical and mental health instead of using pills to fix it."

The Sanctuary

Summer Hours

Monday - Thursday 7 am - 7 pm

Fridays 7 am - 5 pm

Closed on Weekends



Stop by for a game of pool or watch TV during your lunch break
If you have any suggestions for activities for the summer
students stop by the DSA Office and let us know!

perspective SPOKE

Al Pacino was never this Godfather

In the likeness of idols such as Al Pacino and Marlon Brando, I too have reached the precious position of being "the Godfather."

No, I'm not heading a Sicilian family's racketeering operation for La Cosa Nostra. I'm the godfather of a 15-month-old beautiful baby girl named Kaitlin Anne.

It is a remarkable thing when you're able to play a role in another human being's life from day one.

While on a lunch break, I went to visit Kaitlin's mom in her hospital room, not expecting to see the baby, but low and behold, my true intentions for visiting came to fruition. In a matter of minutes, the wee ball of attention was in the room with her mom.

The nurses wheeled in Kaitlin in a little bassinet from the nursery. There she was, buried in blankets, exposing only her pruny face. On her head she wore a pink tuque, giving her the appearance of a miniature lumberjack.

That first day, despite some urging by Kaitlin's mom, I couldn't bring myself to hold on to the baby. It wasn't a matter of not wanting to, but more a case of being afraid to drop the fragile little package. But the fear of dropping her soon ended after I witnessed Kaitlin's brothers playing with her.

In the months following her birth, Kaitlin and I bonded. Seeing the affection and adoration I felt for this little creature, Kaitlin's parents asked me if I wanted to



L. Scott Nicholson

be the baby's godfather.

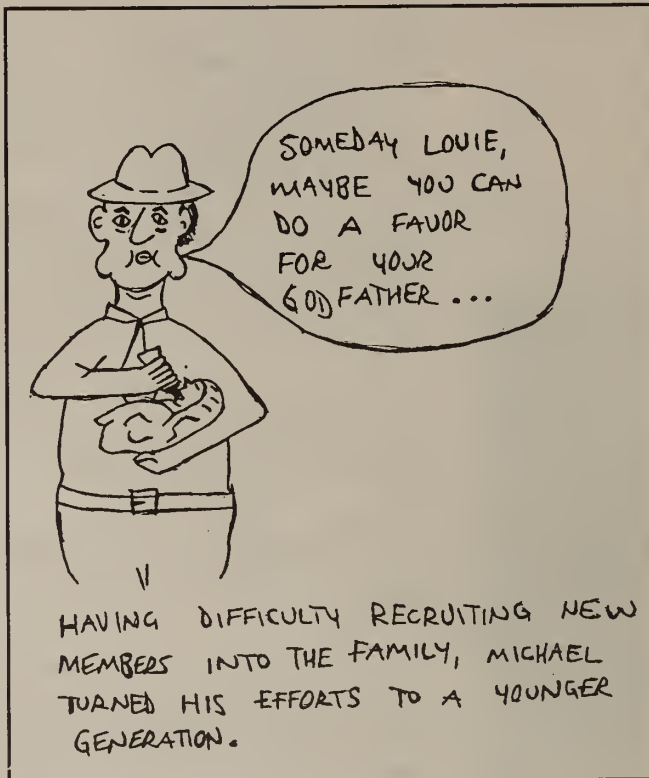
Immediately the answer was yes, while images of myself wearing a dark pin-striped suit, seated behind a large desk in a darkly lit room were conjured up in my mind.

On a dreary September Sunday afternoon, the dismal weather was overshadowed with the joyous occasion of Kaitlin's baptism.

Kaitlin didn't make a sound as the priest poured water over her fuzzy, sparsely-covered-with-hair head. She was more interested in trying to find the source from which the water came, as she strained to turn her head, looking for the culprit.

Since that time when my godfatherhood was officially declared, I have watched Kaitlin grow bigger, grow more hair and develop a personality.

I recently had the fortune of feeding her Cheerios, a cereal she has evidently gained a passion for. By the end of the feeding session, there were more slobber, wet Cheerios on the floor, on her legs and in her sticky hands than there



were in her belly.

My godfather status will undoubtedly be put to the test as Kaitlin will be spending two nights at my apartment. At that time I'll have the duty of changing messy diapers, feeding indistinguishable mush into a squawking mouth and reacting to her every beck and call.

For most people it would be difficult to do such things, but in the case of Kaitlin, I can't wait.

The opportunity to play the lead role as the Godfather is one I look forward to.

Ontario third-largest toxic creator

Like many other Canadians, I always considered my country, especially Ontario, to be one of the cleanest places around.

The fact that we live in a country with clean lakes and clean air has always been a source of pride.

That pride seems to have been misplaced, particularly in Ontario, which has been identified as the third-largest producer of toxic waste among all the United States and Canadian provinces.

The recently released 1994 statistics report, which was compiled by the Commission for Environmental Co-operation, states Ontario factories, mines, smelters, pulp mills and oil refineries produce more chemicals than anywhere else in North America, aside from Texas and Tennessee.

The reason for this is the government has not been strict enough in its approach to environmental issues.

The U.S. has the advantage with the Clean Air Act which enforces strict and rigorous rules and regulations on factories.

Canada is at a disadvantage because there are no national standards.

Ontario Minister of Environment and Energy Norm Sterling said the data is old and that much has changed in the three years since the statistics were compiled.

That is true in that there is new legislation which forces industries to reduce the discharge of chemicals, and the pulp and paper industry has spent over \$2 billion in cleaning up the problem.

Unfortunately, these moves have been countered by actions like the removal of some restrictions on mining explorations on public land, open burning and accumulation of industrial debris.

The Conservative government has also cut provincial support for sewers and residential recycling projects.

The worst thing is that the Environment Ministry has been cut 44 per cent, including a one-third reduction on money spent on enforcement.

The Ontario Environmental Commissioner issued a report earlier this year warning that the Mike Harris government has jeopardized 20 years of progress in environmental protection by taking these actions.

Premier Harris is always saying sensible government can protect the environment at the same time as it frees industry from restrictive rules and regulations.

This latest report shows that there needs to be more responsibility placed into environmental protection.

No one gets a second chance when it comes to protecting the environment.

Once a lake is polluted, a land contaminated or a toxin released, it is next to impossible to make things right again.



Shawn Leonard

'Glass ceiling' not the sole career barrier

Recently I read in a news article about the "glass ceiling," the symbolic obstacle preventing women from moving up the corporate ladder with their male colleagues.

The article, which appeared in The Sunday Star, quotes a study done by Monica Boyd, a sociologist at Florida State University, whose findings indicate that Canadian women are less likely to be managers, to supervise others and to be involved in their company's planning. Also, men earn more than women, even when they hold the same jobs.

As far as I'm concerned the glass ceiling is not the only obstacle women face in life regarding having a career outside the home. Being a woman is the first obstacle in developing a career.

By this I mean that women will always have to take time off from developing a career if they want to raise a family.



Pat Craton

Bearing children can only be done by women; so if a woman wants a family, it would mean taking time off and losing opportunities for advancement in the workplace. Men do not have that problem.

Yet raising children is one of the most important careers and one of the most difficult to do well.

Most people will not deny this, but not many are prepared to acknowledge it either, which is probably why women feel the need to have a job outside the home. Having two careers is difficult, and very few women are able to achieve their full potential doing both at the same time.

For me, being a woman is not an obstacle, merely a reality. I wanted a family and as I could not see myself putting my children into day care, I stayed at home and brought them up myself. Bringing up my own children was the one job that I knew I was the perfect candidate for.

Last September I started the journalism program as a full-time student, and since then, my life has been topsy-turvy. I've

been juggling family, school and community commitments and spreading myself thin.

There have been a number of stressful days in the past 11 months. Those days became more frequent this term when my family circumstances changed somewhat and I was saddled with even more responsibility. Invariably, school work took a back seat because I reasoned that courses could be retaken but my family's special events could not.

The result of this is that my marks have suffered because assignments have been late. So what are my chances of competing for jobs with people with more impressive transcripts than mine? There is a "glass ceiling" over me and I haven't even entered the workplace. I do not consider my situation unique — only that it is a consequence of being a woman.

I'll guarantee, though, that if I ever get out there in the workforce, that "glass ceiling" will be just another challenge. I'm getting good at facing challenges because I've just had 11 months of intensive practice.



Drop us a line.

We welcome your comments and suggestions.



SPOKE welcomes comments and suggestions

SPOKE is mainly funded from September to May by the Doon Student Association (DSA). The views and opinions expressed in this newspaper do not necessarily reflect the views of Conestoga College or the DSA. Advertisers in SPOKE are not endorsed by the DSA unless their advertisements contain the DSA logo. SPOKE shall not be liable for any damages arising out of errors in advertising beyond the amount paid for the space. Unsolicited submissions must be sent to the editor by 9:30 a.m. Monday. Submissions are subject to acceptance or rejection and should be clearly written or typed; a WordPerfect or MS Word file would be helpful. Submissions must not contain any libellous statements and may be accompanied by an illustration (such as a photograph).

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Renovation technician program takes new approach to curriculum

By Tony Kobilnyk

A new approach to carpentry is being introduced at Conestoga's Guelph campus.

The new renovation technician-program will not only address carpentry skills but also the communications skills involved in successfully completing a job, said Al Eisen, a faculty member at the Guelph campus. The new curriculum will include courses in client relations and supervisor to labor communication skills, he said. Hans Zawada, chairman of tech-

nology, trades and apprenticeship said he was approached by local industry about developing a formal training program for the renovations trade. He said until recently there was no formal training for those involved in renovations.

"They just learned on the job," he said.

Statistics show that Canadians will spend \$2.3 billion on renovations this year, Zawada said. This will surpass new home construction, which is projected at just over \$2 billion, he said.

Zawada said the development of

the program took about two years and was accomplished with the help of Tom Lumsden, a retired Conestoga faculty member, in cooperation with local businesses.

The development subgroup included Gary Adam, of Pioneer Craftsman Ltd.; Ron Howald, of Howald Glass and Siding Products; Mark May, of Cambridge Kitchens and Baths Inc.; Marty Van Engen, of Alpine Homes; Lloyd Lindsay, of Lloyd Lindsay Corporation; John Schnarr, of Schnarr Craftsmen Inc.; and Bruce Hutchings and Debra Wright, from Canada Mortgage and Housing Corp.

Eisen said the new curriculum will offer students an opportunity to train in situations that are as close to real life as possible.

Part of that training will include renovations at the former Doon School of Fine Arts, now known as the Homer Watson House and Gallery, he said.

Students will be renovating cabins on the property which once were used as dormitories by those who attended the former school, he said.

Aestero Kalogeropoulos, program co-ordinator at Homer Watson House, said the renovations are in preparation for the 50th anniversary of the founding of the Doon school next year.

She said the three cabins are all that remains of about 12 to 16 structures originally on the property.

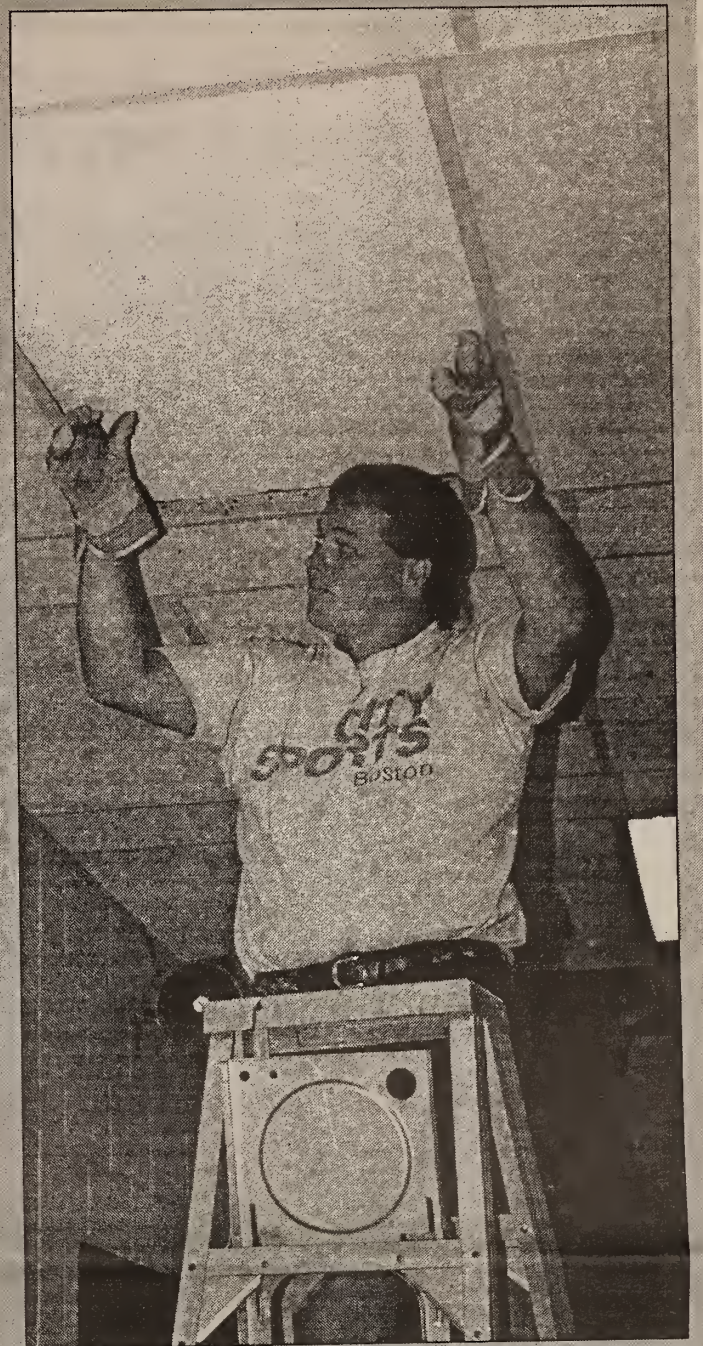
The labor for the renovations will be donated by the students, she said, and fundraising will pay for the materials.

Kalogeropoulos said the cabins may be used as small studio spaces once the renovations are completed.



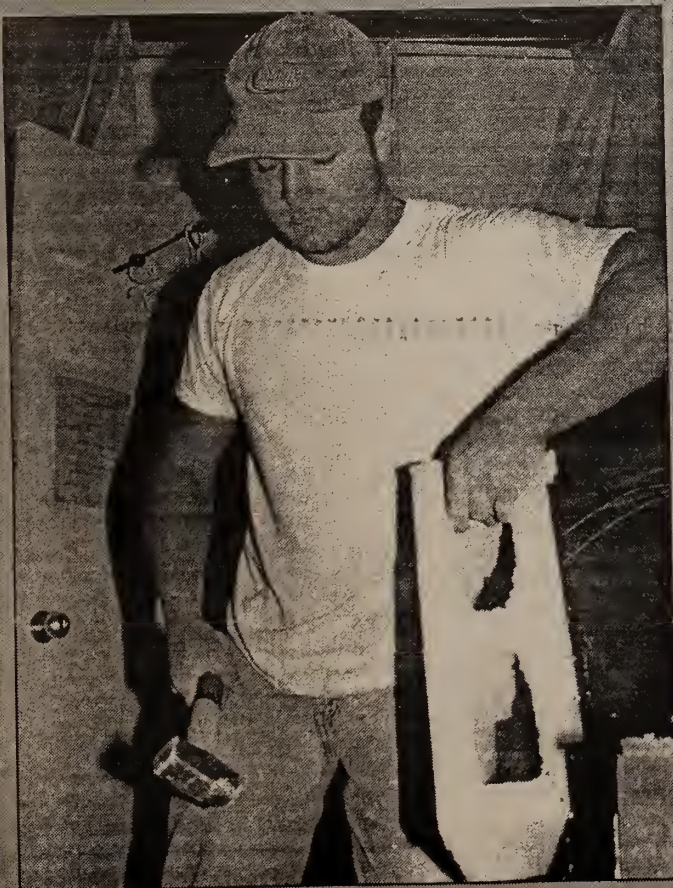
Aestero Kalogeropoulos, program co-ordinator at the Homer Watson House and Gallery, stands in front of one of the cabins to be restored by Conestoga students in the renovation technology program. (Photo by Tony Kobilnyk)

Sealing the job

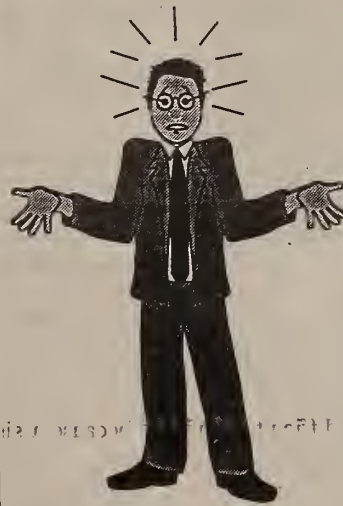


Sean Rogers puts a ceiling panel in place on the fourth floor of Doon campus's main building. (Photo by Lynne Thompson)

Taking it down



Adam Levesque, 22, of Jamesway Construction in Kitchener, knocks down a wall in the graphic design and advertising wing on Aug. 8. (Photo by Lynn Jackson)



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Movie review

Teacher seeks revenge in inner-city genre thriller

187 tells the story of a teacher driven to his students' level of sociopathic violence

By Shawn Leonard

187 is a grim thriller which takes the inner city high school genre to brutal new depths.

Samuel L. Jackson (*Pulp Fiction*) stars as Trevor Garfield, a substitute science teacher.

Trevor was once a great teacher, but at his previous teaching job he was stabbed a dozen times by a student he was about to fail.

This experience sent him into a world of inner rage and fear. He stopped trying to get through to kids who basically don't want to be gotten through to.

This ideology is reinforced when he is greeted in his first class in Los Angeles by kids throwing him looks of pure homicide.

The students are not like the classroom rebels in cinema past. They are not just breaking rules, they are writing their own.

The students have no interest in being educated. School is a joke to them.

The title *187* refers to the California penal code for murder.

The director, Kevin Reynolds (*Waterworld*) lingers over the students' menacing stares which gives the students life to the point that these are not bad kids with hearts of gold.

They're just bad, period.

Even Trevor's innocence is placed under suspicion when one of the students is murdered, and another ends up with his finger mysteriously amputated and all evidence points to him.

This is an interesting concept of a teacher driven to his students' level of sociopathic vengeance.

Jackson is one of the most powerful screen presences in today's movies. Here he is in top form.

187 is an engrossing film in which the viewer will continuously be kept guessing where the plot is heading.

Historic snippet



Joni Yarascavitch (right), an interpreter at Doon Heritage Crossroads in Kitchener, helps Guelph day-camper Natalie Wilson knot a comforter during Summer Fun Day at the historical site.

(Photo by Andrea Bailey)

Round and round



Sherry Plantz twirls Mackenzie Plantz to the music of the Steve Strongman Band at the Summer in the City Blues Festival at Victoria Park, Kitchener, Aug. 10.

(Photo by Ellen Douglas)

Movie review

Ford, Close waste talent in commie-kicking flick

By Tony Kobilnyk

High-flying adventure prevails in *Air Force One*, an action-packed thriller starring Harrison Ford as James Marshall, the president of the United States and Gary Oldman as Ivan Korisunov, a gung-ho, pro-Communist terrorist bent on restoring the motherland to her former glory as an evil dictatorship.

Oldman and his entourage of terrorists believe that they can demand that the Russians release a former Kazakh dictator named Radek from a Soviet prison if they hold the U.S. president hostage. So somehow they manage to bypass what is probably the tightest security on the planet, board the president's plane and hijack the unhijackable aircraft at 30,000 feet as it returns him home from a diplomatic visit to Russia.

What they don't bargain on is that the seemingly mild-mannered, family-oriented president is really a decorated war hero with a mean left hook and an eagle eye with a gun. As it turns out, he also doesn't take kindly to terrorists pointing pistols at the heads of his wife and daughter.

Ford delivers a pretty good performance as the president, considering the limited opportunity he has to show his skills in dramatic performances. Unfortunately, by the end of the movie, once all the fist fights, gun fights and explosions are over, one wonders why Bruce Willis wasn't cast for the part rather than Ford. Oldman, blessed with better lines and more opportunity to perform than Ford, also does well as a politically motivated, anti-America terrorist willing to die for his cause. He makes a convincing freedom-fighter providing crazy looking wide eyes and fits of rage, complete with flying spit when required.

But it becomes clear that while the big names and the promise of action-packed

excitement provide the draw for this movie, the actors themselves can do little to support what amounts to a predictable and weak plot.

Glenn Close, playing the vice-president, might as well have been replaced by Pamela Anderson reading from lines disguised as official documents on her desk. Close has little opportunity to show her talents with standard lines like "What are your demands?" and "All Americans should pray."

Far-fetched action scenes, like a 10-minute gunfight with automatic weapons in smoky, chaotic mahem when the terrorists take the plane, lack credibility. Movie-goers have come to expect the explosive decompression that accompanies every discharge of a firearm in an airplane, but that never happens, leaving the

viewer to assume that each of the hundreds of rounds fired on the plane has found its mark.

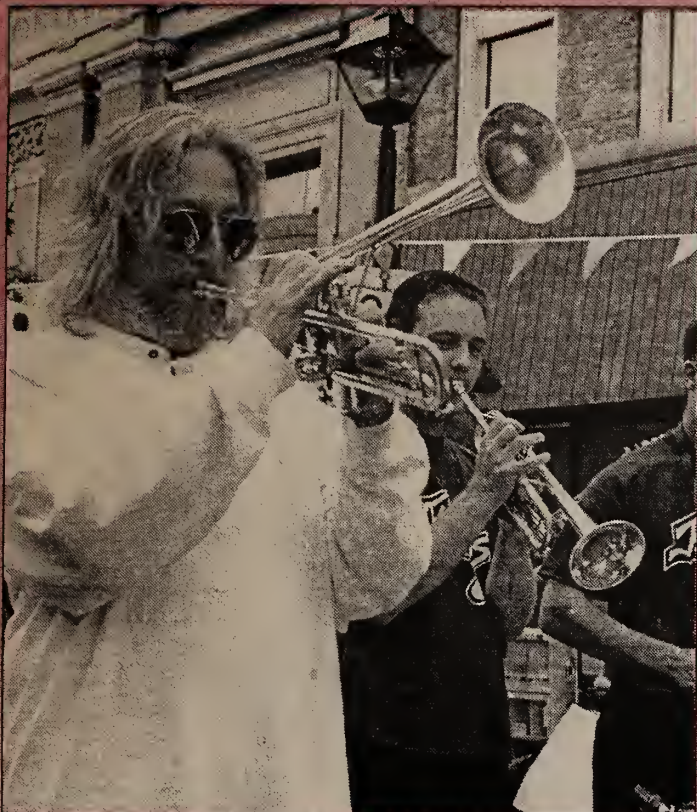
The disturbing thing about this movie, is that it seems to elevate movie violence to a new level. We're all used to seeing terrorists threaten to execute hostages at pre-arranged time intervals unless their demands are met. But in *Air Force One*, they actually do it despite the begging and pleading.

The bottom line is that *Air Force One* is simply a new version of an old favorite American topic; kicking Commie butt. The movie briefly brings some issues about foreign policy to light but they are quickly overshadowed by America once again coming out on top.

Air Force One is the product of director Wolfgang Petersen, who also directed *Das Boot*, a story about a German U-boat during the Second World War. Petersen's previous accomplishment soars miles above *Air Force One*, and the simple story line and unbelievable outcome reinforces that *Air Force One* deserves das boot.

One wonders why Bruce Willis wasn't cast for the part rather than Ford.

Laid back



LOVE THAT JAZZ

ABOVE — Bruce McColl (left) and Tobin Cable of Jazarus were in Cambridge July 26 for the Grand Galt Reunion on Main Street in Galt July 26.

RIGHT — Great Dane Odin and his ferret friend Bishop, owned by Sheri and David Hayes, listen to the sounds of Jazarus at the Grand Galt Reunion.

(Photos by Hélène Beaulieu)



Video/TV review

Early '90s B movie eclipsed by TV spin-off

New *Buffy the Vampire Slayer* series gives something to sink your fangs into

By Bob Puersten

Dateline: Los Angeles. People are disappearing, mysteriously showing up dead with equally mysterious neck wounds. The vampires are on the prowl and the only person who can stop them is the slayer. This is the premise of *Buffy the Vampire Slayer*, a 1992 20th Century Fox release. This movie has spawned a weekly television series which has recently started airing on CKVR (cable 21) Mondays at 9 p.m.

When Buffy Summers (Kristy Swanson) is first introduced, she is an incredibly vacuous, shallow cheerleader whose greatest concern is keeping up with the latest fashions. She is so self-absorbed that she cannot see beyond her narrow world view of mall-trolling and boyfriends.

Destiny soon steps in, however, in the form of a rough-cut, mysterious stranger, Merrick (Donald Sutherland, *M.A.S.H.*, *Invasion of the Body Snatchers*, *Bethune*). It is his role as the "watcher" to train the slayer, as he has done for over a hundred lifetimes. With Buffy, he definitely has his work cut out for him.

Train her he does, though, and Buffy, over the course of the film, visibly matures. As the vampire slayer, her world is turned

upside-down. She alienates herself from her shallow, self-absorbed friends, including her boyfriend Jeffrey. She gains an unlikely ally in the guise of Pike (Luke Perry, *Beverly Hills 90210*), a car mechanic who, with his friend Benny, had crossed paths with the earlier, dippy Buffy.

Before the film is over, Buffy must face Merrick's nemesis, the master Lothos and his right-hand vampire Amilyn (Paul Ruebens, *Pee Wee Herman*) in a show-down at the high school senior dance.

Essentially a B movie, *Buffy the Vampire Slayer* is good weekend movie rental when you're looking for some light fare. If you're looking for something "meatier" to sink your teeth into, perhaps the *Buffy the Vampire Slayer* television series is more your speed.

The show picks up the story line in Sunnydale, Calif. Buffy Summers (Sarah Michelle Gellar, *All My Children*, *A Woman called Jackie*) and her mother have moved to the small town because Buffy has been kicked out of her high school for burning down the gym, which was filled with vampires. (Note: the event is not depicted in the movie.)

Rather than getting away from her duties as a slayer, Buffy finds that Sunnydale is located on the

"hell mouth," a centre of mystical convergence. So, Buffy must battle vampires and other assorted demonic riff-raff with the help of her new watcher, school librarian and technophobe Rupert Giles (Anthony Stewart Head), computer hacker Willow Rosenberg (Alyson Hannigan, *My Stepmother is an Alien*), and Alexander "Xander" Harris (Nicholas Brendon). She is also helped by the mysterious character Angel (David Boreanaz) who leaves Buffy cryptic messages of dangers that lurk on the horizon.

In its television incarnation, the range of acting and character development is vastly improved over its B-movie roots. Throughout the course of its first season, themes such as love, loyalty, and sacrifice are examined as Buffy battles a variety of evil forces.

A strong element which is present in both the movie and television series is the music. In the video, the tracks are largely bouncy and memorable tunes. In the television series, the tone is a little more brooding and sombre.

So, whether you're looking for light entertainment, something deeper, or just some semi-quality time in front of the tube, *Buffy the Vampire Slayer* may be for you.



TOP — Sarah Michelle Gellar, as television's Buffy Summers, prepares for battle with a crossbow.

BOTTOM — Kristy Swanson, as Buffy in the 1992 B movie, trains to slay vampires with a stake.

City of Waterloo opens skateboard park for kids

By Anita Filevski

Last year, Waterloo's King Street merchants were having problems with skateboarders hanging around in front of their stores, discouraging customers from shopping.

The merchants complained about the skaters to the Uptown Waterloo Business Improvement Area, who then took the complaints to the City of Waterloo. Soon the idea of building a skateboarding park was on the table.

Now, almost a year later, the idea has become a reality. On Aug. 16, next to Waterloo Memorial Arena on Father David Bauer Drive, the City of Waterloo will launch its first skateboarding park.

To celebrate the opening, the park will hold a skateboarding competition, said co-ordinator Julie Marshall.

"We're targeting local kids," Marshall said, referring to the problem with skateboarders on King Street. "The city is giving them an alternative."

Skateboarders can enter in one of three age categories: 12 and under, 13 to 17 and 18 and over.

Entrants have 45 seconds to one minute to show off their best skateboarding moves. Each competitor gets only one chance to participate.

There will be three judges, all skateboarders who have been in competition before, Marshall said.

The judges, who run Nowhere Skate in Preston and Preston's skateboard park, will be scoring the competitors on technique, composition and big air style (how high in the air the entrants get), said Marshall.

The competition is not classified as extreme because it is a street-style competition, Marshall said.

The course was designed by Rampage, an indoor skateboarding facility in Toronto. Marshall said Rampage was contacted to design the course and build the equipment for the skaters.

The course consists of a quarter-pipe and two fun boxes — huge concrete slabs with transitional ramps built on all sides. The course has rails, like the handrails people use to go up and down stairs, for skaters to slide off, and there are also ledges.

"We listened to what the kids wanted," Marshall said, when describing the course. "It (the course) takes up 110 feet (33 metres) by 50 feet (15 metres)."

Marshall said she hopes to get at least 10 skaters to enter each division, but she has no idea how big the competition will get.

"It all depends on how many kids come out."

There will be a \$5 contest entry fee for skaters, and the money raised will go towards storage costs and the building of the equipment.

Once the weather gets colder,

Marshall said, the equipment will be stored, and a hockey rink will go up in the park's place for the season.

Marshall said the Waterloo Skateboard Competition has been in the planning stages for a couple of months.

The Uptown Waterloo BIA put up \$2,500 for the park's ramps and equipment, she said, and the City of Waterloo is funding the rest.

There will be an opening ceremony for the mayor and the media in the morning, said Marshall. The competition will begin at noon and go until 5 or 6 p.m.

The first-place winner in each division will win a skateboard from O.W. Sports or Riordans. Second place winners will get gift certificates and clothes, and third place winners will receive CDs, T-shirts and hats.

Disc jockeys will be entertaining the crowd after the competition, Marshall said. The music will last until people start to leave, she said.

The contest is being sponsored by id Magazine, O.W. Sports, McPhail's, Cyclepath, Riordans, HMV, Orange Monkey Music, Generation X Video, and Snug, a skateboarding/raver clothing line based in Toronto.

Sunny Delight will also be on hand to give out free drinks, Marshall said.

The rain date for the competition is Aug 17.

Hoods up



Will Curl touches up the paint on a 1932 Frontenac. It is one of 23 such cars that exist in North America and one out of five in working condition. Frontenacs were built from 1931 to 1933 in Leaside, Ont. A total of 500 cars were built. The car pictured is the 1932-33 body style. The style was changed in 1933.

(Photo by Bob Puersten)

Kitchener-Waterloo Big Sisters seeks volunteers

Lynne Thompson

The Kitchener-Waterloo chapter of Big Sisters is in need of volunteers, said executive director La Ferne Clarke.

"Big Sisters," said Clarke, "is a non-profit organization which seeks to make a positive difference in the life of a child."

The group reaches this goal by matching a female volunteer with a four- to 17-year-old girl, called a "little sister," or a four- to 11-year-old boy, called a "little buddy."

At present, Clarke said, the organization has more children than volunteers. "We have a waiting list of 60, so it usually takes about six months for kids to be matched with a big sister."

Clarke said that although the majority of the children are from sole-parent families, some are from two-parent families but have issues which need to be addressed. Some of these issues include: stress in the family, being new to Canada and having adjustment difficulties, problems with peer relations, economic stress in the family and attention-deficit hyperactivity disorder.

Children are referred to Big Sisters by their school, social agencies or parents, said Clarke. A few children, she said, recognize there is a need and call the organization themselves.

Volunteers must be at least 20 years of age. They are required to submit three references from



La Ferne Clark, executive director of the Kitchener-Waterloo chapter of Big Sisters, says the organization is desperately in need of volunteers.

(Photo by Lynne Thompson)

people who know them well, pass medical and police clearance checks, attend an orientation and do an in-depth interview with Clarke.

After being accepted into the organization, volunteers must agree to spend three hours a week with the child for a period of one year.

Clarke said college and university students, who make up about 40 per cent of their volunteers, have a lot to offer Big Sisters.

"They have a lot of energy, especially with the recreation events we have," said Clarke. "It also gives the child the feeling that

someone young can achieve, which is very important. They see education as something obtainable."

Being a big sister can benefit the students as well, said Clarke. The experience looks good on a résumé and it helps them learn new skills, especially if they are working towards a career in psychology, social work or early childhood education.

It is also a positive experience for volunteers, said Clarke, because they know they are making a difference in a child's life.

For students who want to volunteer but are hesitating because they

don't have a car or extra money, Clarke said these things are not an issue. Big Sisters will make an effort to match volunteers without cars to a child who lives in their area, so buses may be used as transportation. As for money, Clarke said, they encourage big sisters to find activities which are low-cost. This could include baking cookies, going to the park, playing board games, window shopping or attending free events which are put on regularly by the City of Waterloo.

Clarke said Big Sisters also puts on a monthly event which is open to all members and is usually free.

For students who want to help but feel they can't commit themselves for three hours a week, there are a variety of other ways in which they can volunteer.

Nora Whittington, who is in charge of fundraising, said that because 66 per cent of Big Sisters' income is obtained through fundraising (the other 34 per cent comes from United Way), she is always looking for people to help out. She said college students have a lot of creativity which can be put to use in fundraising. There are also projects, said Whittington, which students can work on and perhaps use as credit for a school assignment.

Whittington said Big Sisters has approximately 100 volunteers a year helping with fundraising activities.

Other options for students with time constraints are the recreation committee or the homework helper.

Case worker Sandra Plum-Siefert said homework helpers assist students for one hour a week at local schools from September to April. The recreation committee, she said, meets once a month to plan activities for big sisters to bring their little sisters/buddies to. Some of these events include car rallies, picnics and Halloween parties.

The K-W chapter of Big Sisters is located at 37 Allen St. W., Waterloo and can be reached by calling (519) 743-5206.

U of W encourages future science buffs

By Ellen Douglas

Usually, a typical student at the University of Waterloo is at least 18 years old, but this summer approximately 800 people are at the university who are considerably younger.

The young people, entering Grades 3 through 12, are enrolled in week-long day camps called Engineering Science Quest (ESQ).

Camp director Bill Baer said ESQ has been running since 1991, and it's been growing every year. In 1994, only 280 children attended.

Baer said the camp is student-run through UW's science and engineering faculties.

The University of Waterloo's ESQ is the largest member of Youth Engineering and Science (YES) Camps of Canada. There is a camp in Toronto which has more campers, but because ESQ has a high staff-to-camper ratio, it is considered bigger.

The camp has room for about 120 kids per week for seven weeks, and there are 21 full-time staff and 22 part-time staff. This works out to about five staff members for every camper.

The objective of the camps, said Baer, is to get children interested in science and engineering by giving them hands-on experience. "It helps kids see that scientists aren't goofy, and hopefully it will help to eliminate the perpetual belief that science and computer people are geeks."

The camp's motto is a quote from Albert Einstein: "I hear, I forget . . . I see, I remember . . . I do, I understand."

This year there is a new program at all the YES camps across the

country for children entering Grades 3 and 4. It's called Camp Suzuki, after environmentalist David Suzuki. ESQ hasn't offered a camp for this age group before.

Rory McGee, 8, was a Suzuki camper. As he ate his ice cream made using liquid nitrogen, he described his experience at the camp. "I liked the science and the teachers. We made lungs out of a bottle and we made a kaleidoscope. Going to the pond was my favorite thing so far."

Nina Aghdasi, a camper in the Newton program for students entering Grades 5 and 6, was also enthusiastic. "It's just like school, only a lot more fun. I was here last year and a lot of the things I learned at camp I incorporated into my school work."

The kids aren't the only ones who rave about the camp. Pat Vandelloo, a parent, wrote on her evaluation form: "My 10-year-old is fascinated . . . the learning by doing approach really stuck in his mind . . . I am at a loss to quantify the effect ESQ had on my son except to say he's been inspired."

Another new program this year is the ExXtreme Camp for high school students. This camp gives students the opportunity to explore the world of computers and ride the information highway.

In this camp the students can build an automated "Mars" rover which can be operated from anywhere around the world through Netscape.

The 1997 budget for ESQ was \$195,000.

Camper fees covered \$115,000 of this, university and government donations covered \$60,000 and industry support covered about \$20,000.



Graham Moogk-Soulis (left) and Johnathan Spike paint a bulls-eye which they will shoot a ball through with a catapult they built as a part of Engineering Science Quest at the University of Waterloo. (Photo by Ellen Douglas)

Pro Logic electronic chip brings theatre home

By Hunter Malcolm

Staying home has never sounded so good, thanks to Dolby's development of the Pro Logic chip.

In the mid-'90s the stereo sound company began to market the Pro Logic feature to brand name stereo manufacturing companies. According to retailer Steve Gray, it gives the consumer the opportunity to bring the theatre home.

Gray, who ran the audio department for four years at his family's electronics store in Brantford before going to Future Shop in Barrie, said Pro Logic is extremely popular, and with good reason.

"Whenever someone comes in to the store looking for a new home stereo system I always suggest they consider the Pro Logic feature. For the investment they're making it's worth it because everyone these days rents movies," said Gray.

Pro Logic is a chip within the receiver component of a stereo which is specifically designed as a sound enhancer for movies which were originally dubbed in hi-fi.

This enhancement is achieved, said Gray, by dividing the sound through a five-speaker

configuration.

"A central speaker, which is placed directly on or in front of the television, puts out strictly the dialogue from a movie. Two other speakers, to be placed behind the viewing area, bring out all background sounds, while two more speakers in front, to the sides, put out everything in between," explained Gray.

The end result is a richness in sound that has to be heard to be



believed.

"The audio sensation of having a helicopter swirling overhead in your living room or having an elevator come crashing through the ceiling is absolutely incredible," he said.

Gray said that as a retailer, it's an easy sell to convince people that the feature is worth including in their stereo package.

"Pro Logic sells itself. I'll just let the customer sit and listen for themselves, and they're always amazed," said Gray.

He is quick to clarify, though, that Pro Logic is specifically designed for movies recorded in hi-fi, and does not affect music.

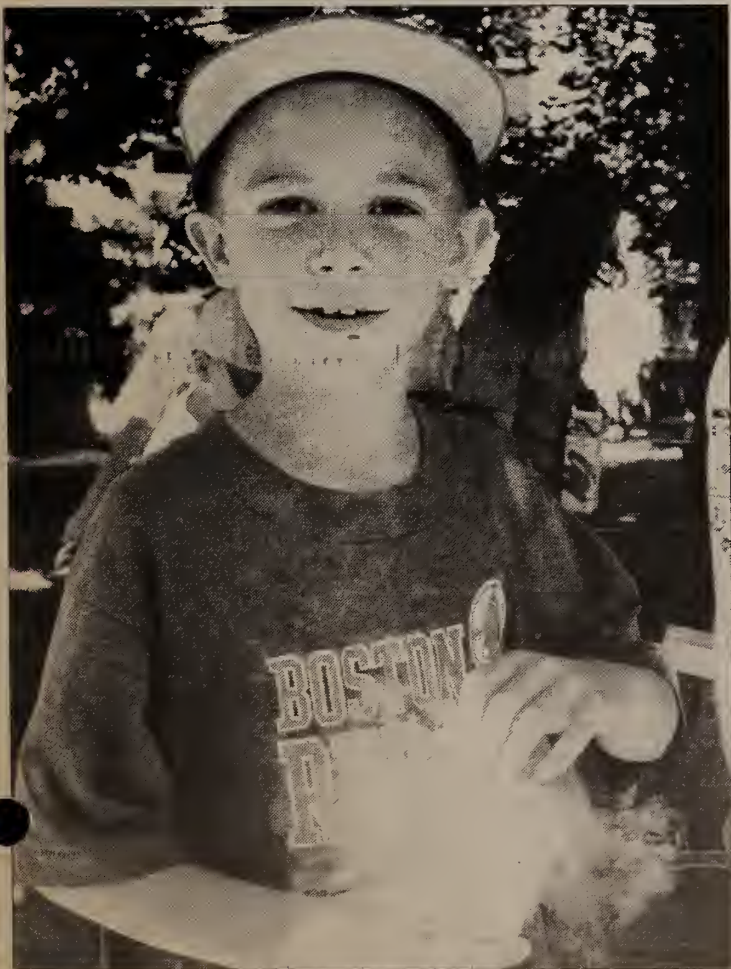
"There can be some confusion among consumers not familiar with the technology that Pro Logic works with music in the same way it does with movies. It only works, though, on movies recorded in hi-fi, played on a hi-fi VCR," Gray said.

Gray said that because stereos aren't something people replace every year, they often approach the purchase of one as an investment that will last. That means including features that are state-of-the-art.

Gray also said the price range for home-theatre stereo systems has become a lot more accessible to the average consumer.

"Of course, in stereos you can always max-out your credit card to get top of the line equipment, but it's not necessary," he said.

"A basic package will generally run for about \$1,000. Assuming you already have a decent TV, you'll need the five speakers, which are available in packages, the hi-fi VCR, and of course the Pro Logic receiver," said Gray.



Rory McGee, 8, stirs his steaming liquid nitrogen ice cream at the University of Waterloo's Engineering Science Quest on July 31. Rory is a member of Camp Suzuki. (Photo by Ellen Douglas)

DNA test proves reliable for catching criminals

By Colleen Cassidy

DNA can determine who committed a crime or who didn't.

Each DNA similarity occurs in about one person in 100,000 to 100,000,000, said Dr. Bernie Glick, professor of biology at the University of Waterloo.

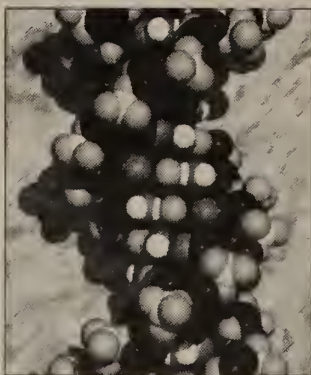
Glick said in order to determine a person's DNA from a forensic perspective, the DNA is isolated from either a blood or semen sample taken from the scene of a crime. It is then compared to samples taken from either the victim of the crime or from an individual who is suspected of committing the crime.

The sample is analyzed, said Glick, to ensure there is a sufficient amount of intact DNA (DNA that hasn't broken down).

DNA of sufficient quality and quantity is then mixed with an enzyme that controls specific chemical reactions and that mixture is automatically broken down. The fragments are then separated on an agarose gel and transferred by blotting onto a nylon membrane, Glick said in his book *Molecular Biotechnology*, which he wrote with J.J. Pasternak.

The membrane is hybridized in sequence with four or five separate radio-labelled probes, Glick said in his book. Each probe recognizes a distinct DNA arrangement.

Following each hybridization, bands the



This is the standard CPK model of DNA.

(DNA Graphics Gallery)

probe has bound to the digested DNA are examined by autoradiography and the banding pattern for each sample is noted, Glick said in *Molecular Biotechnology*.

Before the next probe is used, Glick said, the first one must be removed from the nylon membrane.

Since each hybridization and autoradiography operation can take from 10-14 days, the entire process can take many weeks or even several months, Glick said in his book.

It is for that reason, he said, it takes so long to get the results for a criminal trial.

He said the probes that are used in the analysis often consist of human minisatellite DNA that does not recognize proteins, he said. It is because these minisatellites do not recognize proteins that it is known that DNA varies from one individual to another.

Because of the extensive variability in human minisatellite it is known that each DNA pattern occurs in only one in 100,000,000 people, said Glick.

Thus the resulting pattern, Glick said, is almost as unique as an individual's fingerprint.

He said as well as the forensic applications of DNA, the same technique is used to help determine the paternity of a child.

The DNA banding pattern of the child should be a composite of the patterns of the mother and father, Glick said.

New test for ovarian cancer available in next few years

By Sarah Smith

A new test for ovarian cancer has been developed by researchers at the University of Guelph.

The blood test is more sensitive, and thus more effective, in detecting ovarian cancer in women, said Douglas Gaudette, a senior research associate in the university's department of human biology and nutritional sciences.

"Any new test for ovarian cancer is significant," he said. "There's one currently in use, but it is not a very good test, so anything new that can add on to that may possibly do a better job."

Research to develop the new test involved the detection of increased phospholipid substances in the bloodstream, found in 17 women with intermediate or advanced ovarian cancer who were tested. The test compared these results with the results of six women with lower levels of leukemia and seven women who did not have cancer.

"It measures a modification of lipid metabolism," said Gaudette. "It's more universal as far as ovarian cancer patients."

The current test for ovarian cancer is not very accurate because often it produces

false negatives when detecting antibodies in the blood, said Gaudette.

"With that test, what is being measured is a protein

carbohydrate complex which is shed by the cancer cells and then

detected in the blood. About half the time in patients with early disease, that doesn't happen."

Each year, 2,200 new cases of ovarian cancer are diagnosed, said Nicole (last name

confidential) of Cancer Information Services. Ovarian cancer is the fifth leading cause of death among women in Canada, she said, after cancer of the breast, lung, colon and uterine.

"We have not tested enough patients in early stages of the disease to say the test will pick it up 80 per cent or 90 per cent of the time. That's work that is going on right now."

Douglas Gaudette, senior research associate,
University of Guelph

Ovarian cancer is three times more common in women who have never had children and less common in women who have taken oral contracep-

tives, according to the Canadian Medical Association Home Medical Encyclopedia.

Early detection of ovarian cancer is difficult because symptoms do not appear until the condition is fairly widespread.

"It can sometimes be detected by a pelvic examination," said Gaudette. "An ultrasound would pick it up if there's something there, but it wouldn't say if it's cancer or not. You would need a biopsy for that — you'd need surgery basically."

Gaudette said he thinks the new test will be available in two to three years.

"It's possible that the test could be used in screening, but that really all depends on what the clinical trials show," he said. "It may be useful for screening women at increased risk. It's possible to envision a multi-test screening procedure in the future, in combination with other tests that are being developed."

More tests with a greater number of patients need to be done, however, in order to determine the effectiveness of this new test, said Gaudette.

"We have not tested enough patients in early stages of the disease to say the test will pick it up 80 per cent or 90 per cent of the time. That's work that is going on right now."

Air up there York prof to head satellite project

By Tim Kylie

To Ian McDade, a professor of earth and atmospheric science at York University, the atmosphere is an ironic place.

When it heats up in its lower depths, where people live, it is actually cooling off higher up — the coldest season in the upper atmosphere is summer, he said in a recent interview.

McDade heads a project at York which proposes to study weather patterns in the atmosphere 100 kilometres above the earth's surface with the use of a micro-satellite.

York's proposal is one of four remaining out of the 16 made to the Canadian Space Agency last year when it announced it was looking for projects involving a micro-satellite, McDade said. The others still in the running are from the University of Calgary, the Canadian government, and the Institute for Space and Terrestrial Science, a private science agency located on the York campus, he said.

A micro-satellite, weighing about 45 kilograms and taking up the volume of a filing cabinet, would allow McDade to get a closer look at a little-known atmospheric light he has spent his career studying, he said.

He said the light, similar to the Aurora light of the northern lights but fainter, is

produced by atomic oxygen, which is made up of two separate atoms which react at that altitude.

By photographing the light's brightness and representing degrees of brightness in different colors, he said, it is possible to map circulation patterns in the

"Have you ever seen a soap bubble? If you manage to touch it without it breaking, it sort of wobbles in a very symmetric way. The atmosphere basically does that as well."

Ian McDade, York professor

atmosphere by following the path of the atomic oxygen.

A new discovery in the upper atmosphere that could be examined is the patterns produced by atmospheric tides, McDade said.

Atmospheric tides, he said, are waves in the atmosphere which behave similarly to ocean tides. However, he added, they are not produced by the gravitational pull of the sun and moon, but by a "bump of heat" pressing against the atmosphere.

"Have you ever seen a soap bubble? If

you manage to touch it without it breaking, it sort of wobbles in a very symmetric way," he said. "The atmosphere basically does that as well."

If York receives the go-ahead for its project from the Canadian Space Agency, it will be the first time a micro-satellite is used in Canada, he said, although others have been launched by the United States, Sweden, and Germany.

The University of Surrey in the United Kingdom was an early leader in the use of the technology, he said, having first used micro-satellites in the mid-to-late '80s.

The advantage of micro-satellites for Canada is that they are small enough to be built here, he said.

The budget for building the micro-satellite hardware in the York project is between \$3 million and \$3.5 million, he said. This may seem expensive, he said, but the components must be built to last in the harsh environment of space.

In comparison to most space-related projects, the micro-satellite is cheap. For example, it costs about the same for York to send a rocket up 300 kilometres for 15 minutes, he said.

York students could benefit from the project by getting a chance to work on it, he said. Last year two undergraduate students helped him create the proposal for the Canadian Space Agency, he said.

Airglow layer focus of study

What is the airglow layer?

York professor Ian McDade has spent his career studying the earth's "permanent aurora," a shell of glowing gas in the earth's upper atmosphere, also called airglow or nightglow layer.

The 10-kilometre thick layer, which can be found about 100 kilometres above the earth's atmosphere, is barely visible to the naked eye.

How is the airglow layer formed?

On earth, oxygen molecules are made up of two joined oxygen atoms (O₂). Above the earth's surface, ultraviolet daytime sunlight splits them into two separate atoms. Each separate atom moves around the atmosphere and eventually collides with another atom, thus recreating O₂ in a process known as atomic recombination.

This unique form of O₂ contains extra energy, which it must get rid of in order to revert to normal oxygen. In order to do this it emits light of various colors.

What can the airglow layer do?

Previous studies found that the brightness of the airglow layer can be used to determine the density of oxygen atoms in the atmosphere. By knowing oxygen's density, McDade will be able to map the distribution of oxygen and thus look at how air in the atmosphere circulates.

(Information from Background: What is the airglow layer? from York University)

Star Trek may be leading the way for science

By Bob Puersten

There are 10,000 detectable civilizations in the galaxy, or just us, depending upon whom you talk to.

Frank Drake of the Search for Extra-Terrestrial Intelligence (SETI) project, made the 10,000 civilizations claim on the Arts and Entertainment television special *The Science of Star Trek*, broadcast July 26.

But University of Guelph physics professor Jim Hunt is not so sure.

"It's 10,000 plus or minus 10,000," said Hunt in an interview, adding that Drake's science is not in itself wrong.

On the program, Drake said the rate of the formation of stars is related to the number of suitable planets formed, then related to the the number of planets on which intelligent life might evolve, and finally to the lifetime of any possible civilization.

"And in that case, N turns out to be about 10,000 — 10,000 detectable galaxies," he said.

Hunt said if you use the equation Drake used "then that's the kind of number you come up with."

Hunt said that such an equation gives only the number of detectable civilizations in the galaxy.

"You couldn't say probably. You can only say possibly."

That statistics say we are not alone was one of the many topics that were looked at in the one-hour, A & E program which

looked at how real science related to what was being presented on *Star Trek*.

Anti-matter

Other topics discussed included: living in space; finding a possible radio signal from space; the inven-

"The thing about anti-matter is it has the opposite properties of normal matter."

Professor Lawrence Krauss, in *The Science of Star Trek*

"Where would you confine it? You can't contain it in matter."

Jim Hunt, physics professor, University of Guelph

tion of the hypo spray, a 24th-century-style needle; and *Star Trek*-style medical imaging technology; and the construction of machine intelligence. In fields as diverse as physics and medicine, *The Science of Star Trek* looks at how science is chasing the Enterprise.

According to the program, 30 years ago, anti-matter, which is

used as a source of power in the fictional *Star Trek* universe, has since been created at the CERN particle accelerator in Switzerland. Walter Oelert, who worked on the project, said in *The Science of Star Trek* that the first atoms of anti-hydrogen were created on April 22, 1996.

"The thing about anti-matter is it has the opposite properties of normal matter," said Prof. Lawrence Krauss in the A & E program.

So, said Krauss, while a normal proton, a particle that helps make up matter, is positively charged, an anti-proton is negatively charged.

"When anti-matter comes into contact with matter, the two can annihilate completely, producing 100 per cent energy," said Krauss.

However, said Hunt, the main problem is how to hold anti-matter.

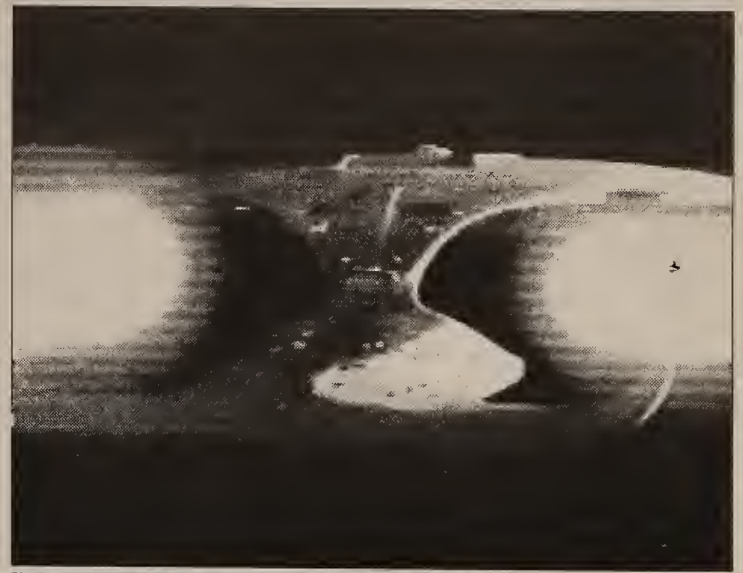
"What would you confine it in?" asked Hunt. "You can't contain it in matter."

Planet discovery?

Also discussed in the program was the discovery of the first Earth-type planet outside of our solar system, around the star 70 Virginis, by Berkeley astronomer Paul Butler.

Butler said the light from stars washes out the existence of planets, so astronomers have to look for indirect signs that a planet is present.

The gravity from the orbiting body, said Butler, causes the star



The Enterprise from the popular *Star Trek* movies and television series is fueled by a hypothetical reaction between matter and anti-matter.

to wobble.

One interesting creation made by the Defense Research Agency in England is a teleporter based on the concept espoused in *Star Trek: The Next Generation*.

20th century teleporter

In it, a person or object is scanned and the information making up that person or object is sent to the new location. The 20th century teleporter, said John Rarity in *The Science of Star Trek*, is moving photons using crystals and lasers.

Lawrence, in the A & E program, said that the average person is

made up of 10 to the 28th atoms, or 10 to the 28th kilobytes of information.

In order to store the information to make up one person, he said, you would need to stack hard drives from here to one-third of the way to the centre of the Milky Way galaxy, about 100,000 light years and it would take longer than the age of the universe to transport it.

Said *Star Trek* science consultant Andre Bourtanis, "What we try to do on *Star Trek* is portray a positive vision of the future."

"How and whether the vision is achieved comes down to the real scientists and engineers."

Fishfinders are a must for today's competitive fishers

By Hunter Malcolm

For many people, fishing is not so much a sport as it is a relaxing pastime. It provides an opportunity to get out on the water and enjoy nature, in an ambience of peaceful solitude, and enjoy nature.

Actually, catching a fish does not have to be the result of the tough hours put in at the water's edge but some of those who take it seriously believe electronic fishfinders offer

"I personally don't like to use them."

John Lind, weekend sportsman

an incredible advantage.

Mike Avery, who has worked for Holmedale Sports in Brantford for 15 years, said the technology of these devices has become so sophisticated, and at the same time so user-friendly, that they have become essential gear for the serious angler.

"Fishfinders themselves have been around for many years now," said Avery. "When they first came out they were more of a novelty and rather crude by today's standards, but now they are powerful little computers."

Like any technology that affects a traditional sport such as fishing, where half the challenge is finding where the fish were in the lake, there are different attitudes toward these gadgets.

"I personally don't like to use them," said weekend sportsman John Lind, whose grandfather taught him the traditional skills when he was a boy.

The finders themselves are about the size of a small radio that mounts on the dashboard of a boat.

The display screen illustrates a two-dimensional profile of the bottom area around the boat and any fish within the scanning radius will show up as well as its depth.

Like any technology that affects a traditional sport such as fishing, there are different attitudes towards these gadgets.

"I personally don't like to use them," said Lind, whose grandfather taught him the traditional skills when he was a boy.

"They're interesting, and they really have come a long way since they first came out on the market, but for me personally, the greatest satisfaction comes from catching a fish using my own wits, not a computer," he said.

Avery said people who take advantage of fishfinders are ones who do a lot of competition derby fishing.

"Because the finders are allowed in many of the fishing tournaments, competitors need to use them just to stay abreast of one another. Someone who doesn't have one in a tournament may find themselves at a certain disadvantage," he said.

Although Motorola is not a company usually associated with fishing equipment, it has contributed to many of the developments in the technology of fishfinders.

Avery said high-end fishfinders, such as the Hummingbird Wide model, utilize what is called the "Tri-Beam Transducer."

"Essentially, what it offers anglers is continuous 90-degree side-to-side coverage of the areas around the boat. The Wide will display the exact depth and distance of fish from your boat, which ones are to the left, right or directly below," he said.

The development of this technology has taken fishfinders from a rich man's gadget to a practical tool for competitive anglers. The variety of features available is reflected in the price range, which starts at about \$200 and can go as high as almost \$1,000.



Taking centre stage

Canadian women's hockey champion speaks to day-campers

By Andrea Bailey

One of the players who contributed to Canada's undefeated record at the women's world hockey championship tournament this past April shared her on-ice success stories with three day-camp groups at the Conestoga recreation centre Aug. 7.

Angela James, who played centre for Team Canada, spent almost an hour answering the children's questions, ranging from topics such as how long she has played hockey to whether or not she has met Mr. Bean.

"I go out and speak to many high schools and camps," said James. "It's the only way I feel I can educate people about the game."

She said by telling her stories, she hopes to build confidence that children need to be champions of some kind themselves.

The 32-year-old Toronto native said she is looking forward to attending her first Olympics, which will take place the beginning of February in Nagano, Japan. Though she still has to make it through the final team cuts, she said, she is optimistic about her chances.

She has represented Canada in all four world championships and said she is currently preparing to leave Sept. 1 for Calgary to train

with the rest of the team for about five months.

"From September, we will play a lot of exhibition games before the actual Olympic competition," said James. "There is a possibility there will be some changes made from the original team that goes in. But everything should remain pretty familiar."

"It's the only way I feel I can educate people about the game."

*Angela James,
Team Canada centre*

She said the gold medal she won at the world tournament at Kitchener's Dom Cardillo arena almost four months ago has given her more public recognition than any other past championship.

"It's good to see that the popularity of the sport is increasing," said James.

She said there is a group out of New York that is trying to begin a professional women's hockey league, similar to the NHL. "I think that would definitely boost even more interest in the sport."

Though, she said, she will never forget the feeling of winning her

most recent gold medal in overtime, the sensation of meeting different people and knowing that she won in front of a lot of her hometown fans was unforgettable.

"When I got home, I got a ton of e-mail and phone calls from people I didn't even know," said James. "They wanted to congratulate me and the team. It really meant a lot to know that there was that much support for us."

Through her 20 years playing hockey, she said, her mother has always been her greatest supporter. "My mom makes me pick her up for all of my games and gets mad if I don't. She has seen all of my championship games and wants to be at the Olympics next year."

As for the look of the Olympic team, James said, fans will see a fast, conditioned group of young athletes who will mesh well after being together for almost half a year.

She said the team's American nemesis won't concern them, even after the close gold-medal round overtime victory in April.

"We always tend to come out ahead of the U.S.," she said. "We'll just have to keep them down and stay ahead."

She added, "People are going to see a team at the Olympics that's going to win the gold medal."



Angela James, centre for the Canadian women's world hockey champions, passes around her gold medal to the summer day-campers at the recreation centre on Aug. 7.

(Photo by Andrea Bailey)

Goalie school attracts range of players

By Andrea Bailey

Travelling all the way from Anaheim, Calif., to Conestoga's recreation centre so his son could attend former NHL star goaltender Rick Heinz's school for goalies doesn't bother Mark Mathews in the least.

He said his son, Todd, has never learned as much as he has with the Heinz school. That is why he doesn't mind making the trip to wherever the school is taking place.

"The instructors here actually care about the kids," said Mathews. "They remember the kids' names and where they're from, which means a lot to me and to my son."

Mathews said he also likes the school's style in pushing the skills, however, not to the point of pushing the players away from the game.

"They always focus on the kids' good points," he said. "But they are very good at correcting the negative spots in their games as well. With one pointer, the instructors change the kids' games in a flash."

"My son skated on his toes for the longest time, and they corrected it with one simple pointer. They definitely know how to solve problems."

Rocco Trentadue, the school's head on-ice instructor at the recreation centre, said the Heinz school is ahead of other schools



Sean Kyle practises some goaltending skills he learned at the Rich Heinz goalie school. The school was at the recreation centre from Aug. 4-8.

(Photo by Andrea Bailey)

of its kind because the instructors focus on customizing the program for up-and-coming goaltenders, while at the same time stressing the fun of the game.

"We don't play on the future, such as the NHL, at this point because the kids are too young," said Trentadue. "We just want the kids to work to their potential and

become comfortable with goaltending."

He said the school is for people of all ages. However, the average ages are usually between seven and 14. He also said the school has been in operation for at least 13 years and has made stops in Kitchener over the last three or four years.

Trentadue said he has an extensive background in the sport. He said he was picked up by the Tampa Bay Lightning of the NHL in 1992. Since then, he said, he played in an east coast farm league until he injured his knee and was forced to leave the game.

He said he is connected to the goalie school because Rick Heinz is his sports agent.

Heinz is no stranger to the NHL either. He played professionally for nine years, split between the St. Louis Blues and the Vancouver Canucks.

Heinz was not able to spend the entire week of Aug. 4-8 at Conestoga because, Trentadue said, he had other business to attend to concerning the goalie school in other cities.

"When Rick isn't here, I'm in charge of making sure we give the students all we can," said

Trentadue. "Our goal is to modify to goaltenders from all levels."

The three levels consisted of the regular, advanced, elite and super-elite groups.

Trentadue said the regular group focuses on movements, shots and techniques. The advanced group, he said, focuses on specific game situations. He said the elite and super-elite groups focus on high-intensity plays which are geared to goalies who are preparing for junior hockey.

Trentadue said the school's attendance increases in most cities each year. He believes this

"We just want the kids to work to their potential and become comfortable with goaltending."

*Rocco Trentadue,
head on-ice instructor*

is because both the students and instructors work so hard during the on-ice teaching times.

Mathews said he appreciates the dedication of the school in giving his son a lot of goaltending knowledge, as well as a good workout.

"Todd is asleep from the time he leaves the school until he wakes up to go back to the school the next morning. That shows me they are definitely building my son's skills."

He added, "Since we've come to this area for the goalie school, our family is probably going to move here. We just hope the winters aren't too bad."